

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-18-39  
Relating to Certification of New Motor Vehicles

VOLVO CAR CORPORATION

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1985 model-year Volvo Car Corporation exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
FVV2.3V5FEL9	141 (2.3)	Three Way Catalyst with Closed Loop (Electronic Fuel Injection)

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the certification emission standards for this engine family to be listed on the window decal required by "California Assembly-Line Test Procedures for 1983 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles":

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.41	7.0	0.7

The following are the certification emission values for the above engine family:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.27	2.8	0.3

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.15 of Title 13, California Administrative Code which includes repair or replacement of emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.


BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1981 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 21<sup>st</sup> day of August, 1984.



K. D. Drachand, Chief  
Mobile Source Division

Manufacturer Volvo Car Corporation Executive Order No. A-18-39  
 Engine Family FVV2.3V5FEL9 Evaporative Family EZ  
 Engine CID (Liters) 141 (2.3)I-4

## ABBREVIATIONS

Ignition System

CA-Centrifugal Advance  
 EEC-Electronic Engine Control  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
 nV-nVenturi Carburetor  
 -Variable Venturi

Exhaust Emissions Control System

AIP-Air Injection-Pump  
 AIV-Air Injection-Valve  
 CL-Closed Loop  
 EGR-Exhaust Gas Recirculation  
 EM-Engine Modification  
 OC-Oxidation Catalyst System  
 TOC-Trap Oxidizer Continual  
 TOP-Trap Oxidizer Periodical  
 TR-Thermal Reactor  
 TWC-Three-Way Catalyst System

Special Features

CCV-Combustion Chamber Valve  
 CFI-Central Fuel Injection  
 DID-Diesel Injection-Direct  
 DIP-Diesel Injection-Prechamber  
 EFI-Electronic Fuel Injection  
 IC - Intercooler  
 MFI-Mechanical Fuel Injection  
 TC-Turbocharged

VEHICLE MODELS:

<u>Vehicle Model</u>	<u>Car line</u>	<u>Body Type</u>
240 DL	DL/GL/GLT	4 DR Sedan/Wagon
240 GL	DL/GL	Wagon
740 GL	760	Sedan
740 GLE	760	Sedan

DRIVE SYSTEM: Front Engine/ Rear -Wheel Drive

E.O. #A-18-39

1985 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

☒ Passenger Cars    ☐ Light-Duty Trucks    ☐ Medium-Duty Vehicles    ☒ Gas    ☐ Diesel

Manufacturer Volvo Car Corporation Page 2

Engine Family FVV2.3V5FEL9 Engine Code -

ECS (Special Features) TWC-CL, EFI CID (Liter)-Type 141(2.3) I-4

Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Equiv. Test Weight	Ign. System Part No.	Fuel System Part No.	EGR Valve Part No.	Label Ident. Part No.
FEL9:							
1P20	240DL Sedan Wagon	M5	3250 3375	Distributor Assembly Volvo: 1332587	Electronic Control Unit Volvo: 1346107	NA	1345407
2P20	240GL Wagon	A4		Bosch: 0232506001	Bosch: 0261201011		
1P20	740 GL	M5	3250				
2P20		A4					
1P70	740GLE	M5		Volvo: 1336087	Volvo: 1336505		
2P70		A4		Bosch: 0237502001	Bosch: 0261240029		

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

\*Add 10% to dyno test HP for air conditioning usage.

Date of Issue -

1985 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: Volvo Car Corporation

Executive Order No. A-18-39

Engine Family: FVV2.3V5FEL9

<u>Model</u>	<u>Body</u>	<u>Trans</u>	<u>ETW</u>	<u>RLHP</u>
DL	4 Door	A3+OD	3250	10.8
		M4+OD	3250	10.8
	5 Door	A3+OD	3375	11.2
		M4+OD	3375	11.2
GL	4 Door	A3+OD	3250	10.0
		M4+OD	3250	10.0
	5 Door	A4+OD	3375	11.2
		M4+OD	3375	11.2